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Dr. Erica Brittain joined the Biostatistics Research Branch at the National Institute of Allergy and Infectious Diseases (NIAID) in 2003. She collaborates with scientists in the Division of Allergy, Immunology, and Transplantation, and also at the NIH Clinical Center in the Laboratory of Allergic Diseases. In addition, she conducts research on clinical trial design. Prior to NIAID, Dr. Brittain worked at FDA Center for Drug Evaluation Research, where she studied non-inferiority trial design issues in the regulatory setting. Previous employment includes the National Heart Lung and Blood Institute and Statistics Collaborative. Dr. Brittain has worked in the clinical trial area for more than 20 years, and has published on various clinical trial design issues including: internal pilots, interim testing, factorial designs, subjective endpoints, and non-inferiority trials. She also served as Associate Editor of *Controlled Clinical Trials* from 1994-1998. In addition, she is currently a member of several Data and Safety Monitoring Boards. Dr. Brittain earned her Ph.D. in Biostatistics at the University of North Carolina in 1984. She also received an M.S. in Statistics from Stanford in 1980, after graduating with a B.S. in Mathematics from Tufts in 1977. (*Updated January 2005*)

Research Interests:
Clinical Trial Methodology, Non-inferiority Trials, Adaptive Designs, Subjective Endpoints

Selected Publications:

Brittain E, Schlesselman J, and Stadel BV. Cost of case-control studies. *American Journal of Epidemiology* 1981; 114:234-243.

Brittain E. Probability of coronary heart disease developing. *Western Journal of Medicine* 1982; 136: 86-89.

Brittain E and Schlesselman JJ. Optimal allocation for the comparison of proportions. *Biometrics* 1982; 38: 1003-1009

Davis CE and Brittain E. Robustness of progressively censored comparison of exponential survival curves to departure from exponential distribution. *"Biostatistics: Statistics in biomedical, public health and environmental sciences"* PK Sen (editor). Elesvier Science Publisher, Amsterdam 1985; 31-38.

Brittain EH. P-values for the multi-sample Kolmogorov-Smirnov test using the expanded Bonferroni approximation. *Communication in Statistics-Theory and Methods* 1987; 16:821-835.

Brittain E and Wittes J. Factorial designs in clinical trials: the effects of noncompliance and subadditivity. *Statistics in Medicine* 1989; 8: 161 –171.

Wittes J and Brittain E. The role of internal pilot studies in increasing the efficiency of clinical trials. *Statistics in Medicine* 1990; 9: 65-72.

Cutler JA and Brittain E. Calcium and blood pressure. An epidemiologic perspective. *American Journal of Hypertension* 1990; 3: 137S-146S.

Brittain E and Wittes J. The run-in period in clinical trials: the effect of misclassification on efficiency. *Controlled Clinical Trials* 1990; 11: 327-338.

Brittain E and Bailey K. Optimization of multistage testing times and critical values in clinical trials. *Biometrics* 1993; 42; 763-772.

Brittain E, Palensky J, Blood J, and Wittes J. Blinded subjective rankings as a method of assessing treatment effect: A large sample example from the Systolic Hypertension of the Elderly Program (SHEP). *Statistics in Medicine* 1997; 16: 681-693.

Wittes J, Schabenberger O, Zucker D, Brittain E, and Proschan M. Internal pilot studies I: type I error rate of the naïve *t*-test. *Statistics in Medicine* 1999; 18: 3481-3491

Zucker D, Wittes J, Schabenberger O, and Brittain E. Internal pilot studies II: comparison of various procedures. *Statistics in Medicine* 1999; 18: 3493-3509

Brittain E and Lin D. A comparison of intent-to-treat and per-protocol results in antibiotic non-inferiority trials. *Statistics in Medicine* 2005; 24: 1-10.

Brittain E, Follmann D, and Yang S. Dynamic comparison of Kaplan-Meier proportions: monitoring a randomized clinical trial with a long-term binary endpoint. Biometrics 2008 (in press).